Remarks

Claims 1-6 are pending in the application. Claims 1-3, 5 and 6 have been variously rejected under 35 U.S.C. §§ 102 and 103. Claims 1, 3, 4 and 6 have been amended herein and are fully supported by the specification. Claim 5 has been cancelled. Claims 7 and 8 have been added to clarify Applicants' invention. For at least the reasons stated below, Applicants assert that all claims are now in condition for allowance, and, therefore Applicants respectfully request the Examiner's reconsideration of this matter.

1. Claim 4 is Now Rewritten

The Examiner objected to claim 4 as being dependent upon a rejected base claim, but said that claim 4 would be allowable if rewritten in independent form. Claim 4 has herein been amended to incorporate the limitations previously found in claims 1 and 4. Applicants assert that the claim is now in form for allowance and request that the Examiner remove the objection and allow claim 4.

2. 35 U.S.C. § 102 Rejections

Claim 1 has been rejected under 35 U.S.C. § 102 as being anticipated by E.L. White (US Patent 1,154,358) (hereinafter referred to as "White"). Applicants respectfully oppose this rejection and assert that not every element of every claim is taught by the White reference.

MPEP § 2131 provides in part:

"A claim is anticipated only if <u>each and every element</u> as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). "The identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

In light of the amendments and the below remarks asserting that each and every element is <u>not</u> found in the cited reference, Applicants respectfully request the Examiner to withdraw the §102 rejection.

A. Applicants' Invention

Applicants' invention is generally a fire-safe lighting system that relies on multiple lower wattage halogen light bulbs. These light bulbs together provide wattage generally equivalent to single high-watt halogen bulb used in prior-art halogen lighting systems. For example, in one embodiment, rather than use a single 300-watt halogen bulb, the invention uses five 60-watt bulbs (i.e., 5×60 watts = 300 watts).

Unlike prior art systems, Applicants' multi-bulb approach does not create an operating temperature high enough to pose a risk of combustion should drapes or other flammable material contact the light bulbs. For example, instead of a 300-watt bulb's dangerously hot operating temperature, each of the 60-watt bulbs operates at a significantly lower temperature, such that the temperature of the shade covering the bulbs will be less than 500 degrees. Even though the light bulbs operate at a safer temperature, Applicants' invention place the series of bulbs within the housing, covered by a shield that inhibits access to the light bulb units and providing the temperature reductions mentioned above. In some embodiments of the present invention an air ventilation system and/or a heat sensor are also included as other fire-safe lighting features.

B. White's Prior-Art Invention Is Not Relevant

Figure 1 of *White* shows what can be understood to be a ceiling light fixture in which links 17 attach the fixture to the nearby ceiling and a ring supports a shade/bowl 18 and places the bulb units 20 within the shade/bowl 18. The Examiner asserts that *White*'s invention includes a series of bulb units 20, a shield/shade 18, and a housing (figure 2), where the shield/shade 18 inhibits access to the plurality of bulb units 20. Applicants agree that element 20 is a series of bulb units and that the shield/shade 18 may inhibit access to the bulbs 20. However, Applicants do not agree that a housing is illustrated in figure 2. Also, Applicants do not agree that the shade (element 18) acts in similar fashion to the shield of the present invention.

First, figure 2 shows no form of housing. A "housing" is an object that covers or protects, such as a case or enclosure. Figure 2 shows no covering or protection, no case or enclosure. Rather, *White* describes Figure 2 as a "plan view of the ring detached" col. 1, line 55 to col. 2 line 1. In other words, only a circular ring with arms connecting the bulbs is shown in Figure 2. The ring in *White*'s Figure 2 does not serve to cover or protect, nor does it contain the light bulbs within its case or enclosure. Therefore Applicants assert that figure 2 does not show a housing, as required for a section 102 rejection.

Second, element 18 (the shade) is not equivalent to Applicants' shield. As explicitly claimed, Applicants' shield is "for inhibiting access to the plurality of light bulb units." This is not the feature performed by *White*'s bowl/shade 18. As *White* explains, the bowl/shade 18 serves the purpose of "producing semi-indirect lighting effects, ... to reflect light against a wall or ceiling and transmit a diffused glow from lamps located within the bowls," col. 1, lines 11-16. (Also see, Figure 1, below.) It is clear from reading *White* that neither this shade (nor the invention as a whole) is concerned with inhibiting access to the plurality of light bulb units by use of a shield. To the contrary, one aspect of *White's* invention is to make it easier to access the light bulb units, permitting "the removal of the bowl for cleaning or attachment of the lamps without taking down the fixture, which has heretofore been necessary when employing a bowl of the shape shown in [the] drawing," col. 3, lines 42-47.

Claim 1 has been amended to clarify the positioning of the shield, housing and bulb units. As presently amended, claim 1 states that the plurality of light bulb units are positioned <u>between</u> the shield and the housing and that the shield limits access to the bulb units from <u>above</u>.

C. Arguably White's Bowl/Shade 18 is a Housing, but then there is no Shield

As previously described, while the Examiner asserts that Figure 2 teaches a housing, the ring of that figure fails to be such a housing. However, Applicants' understand that White's bowl/shade 18 could arguably be viewed as a housing since this bowl/shade 18 (with the help of ring 10) is an object that covers or protects, such as a case or enclosure. However, with this view, the bowl/shade 18 cannot also act as a shield since claim 1 requires that the bulb units be positioned between the housing and the shield. Therefore, whether the bowl/shade/ring (10 & 18) combination is viewed as a housing or as a shield, White's invention lacks one of either the housing or the shield.

In addition to the above discussion showing the shortcomings of the *White* invention, *White* also does not include the new limitations presently amended in claim 1, including:

- (a) the light bulb units are uniformly spaced and positioned between the shield and the housing;
- (b) the light bulb units are halogen;
- (c) access to the bulb units is inhibited from above due to the shield; and
- (d) the operating temperature of the shield is below 500°F, thus minimizing fire danger.

As White fails to teach each and every element of claim 1 (as amended), Applicants respectfully request withdrawal of the § 102 rejections.

3. 35 U.S.C. § 103 Rejections

Claims 2, 3, 5 and 6 are rejected under 35 U.S.C. § 103 as being unpatentable over White in view of Lavy (US Patent 6,059,426) (hereinafter referred to as "Lavy"). Because the combination of White and Lavy fails to teach or suggest all of the claim limitations, and because there is no suggestion or motivation to combine White with Lavy, Applicants respectfully object to these rejections.

A. There is no Evidence that the Prior Art Teaches or Suggests All Claim Limitations

Section 2143 of the MPEP provides in part that "to establish a prima facie case of obviousness ... the prior art reference ... must teach or suggest all the Claim limitations." (emphasis added). The recent decision of the U.S. Court of Appeals Federal Circuit ("CAFC") of *In Re Lee*, 61 USPQ2d 1430, is particularly pertinent to the issue of motivation or suggestion. That case was appealed after the Patent Office Board of Appeals rejected the need for any specific hint or suggestion in a particular reference to support the combination of prior art teachings. Rather, for the *Lee* application the Board only relied upon basic knowledge or common sense to support the obviousness rejection. The CAFC overruled the Board of Appeals' holding. At page 1433, the CAFC addresses the purpose of the Administrative Procedure Act, which requires administrative agencies (including the Patent Office) to not only have reached a sound decision, but to have articulated the reasons for that decision. In essence, the CAFC requires that there be **evidence** of the showing of a suggestion, teaching or motivation to combine the state of the art, including when it might be considered basic knowledge or common sense to combine or modify references.

Because the cited references alone or in combination fail to teach or suggest <u>all</u> of the Claim limitations, and because the cited references and the Examiner fail to provide <u>evidence</u> of a showing, teaching or motivation to combine the references, Applicants respectfully request that the Examiner's §103 rejections be withdrawn.

As shown in the discussion of the 35 U.S.C. § 102 rejections above, *White* does not teach or suggest all claim limitations of independent claim 1. As the dependent claims 2, 3, 5 and 6 include all of the limitations of the independent claims from which they depend, *White* therefore does not teach or suggest all claim limitations of the dependent claims. The

Examiner asserts (incorrectly) that *White* teaches everything but for a vent area (claim 2), a heat sensor (claim 3) and a tilt switch (claim 6). Even if this is true, *Lavy* does not also teach or suggest the other elements from claim 1 that are missing in *White*, as discussed above. As amended, independent claim 1 requires a plurality of light bulb units spaced within the housing, wherein, the plurality of light bulb units provides a combined wattage, but individual light bulb units do not create a heat point equivalent to a single bulb unit that would provide the combined wattage. In contrast, the lamp head of *Lavy* clearly contains an individual halogen light bulb unit, col. 8, line 17; col. 2, line 5-8; and FIG. 2, no. 51 and 52. *Lavy* embodies "a holding means for receiving a high voltage halogen light source," col. 2, lines 5-6 (emphasis added). Further, the Lavy reference discloses that "[t]he high voltage halogen light source is a halogen bulb facing upward according to the present embodiment," col. 3, lines 20-22 (emphasis added). It is evident from the language of *Lavy* that it teaches a light fixture having only one light bulb unit and fails to teach a lighting system with a plurality of bulbs.

Moreover, Lavy's failure to utilize a plurality of light bulb units requires it to contain a "high voltage halogen light source," which creates a high temperature burning zone "above the reflecting concave disc of the reflector member and around that halogen light source," col. 2, lines 18-22. In other words, Lavy teaches the very type of dangerous lighting fixture problems for which Applicants' invention solves. Applicants' invention addresses the fire-safety problem by altering the heat source itself – the light bulbs, to eliminate dangerous hotspots. Lavy merely teaches an anti-combustion arrangement that reduces the heat once it has been emitted from the high voltage halogen light source and prevents combustible materials from entering the high temperature burning zone.

Claim 5 has herein been cancelled. However, a similar limitation relating to the operating temperature of the lighting system being generally less than 500°F has been incorporated by amendment into claim 1. As directed to this limitation, the Examiner asserts that Lavy's "high temperature burning zone 50" is equivalent. Applicant's limitation of an operating temperature less than 500°F is because at or below that general temperature, lighting system does not pose a significant threat of combusting flammable materials, such as curtains. Thus, Applicants' temperature limitation can be considered a "non-burning zone", which is directly opposite to Lavy's "high temperature burning zone 50." Applicants therefore request this rejection be withdrawn.

Claim 6 includes the limitation of a tilt switch. While Examiner asserts that *Lavy* teaches such a limitation, Applicants' are unable to find it anywhere in the *Lavy*

specification. Applicants' therefore request that the Examiner specify the location of this limitation in *Lavy* or else withdraw the rejection for claim 6.

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For at least the reasons stated above, *White* and *Lavy*, alone, or in combination, fail to disclose or suggest all claim limitations in the present invention as listed in claims 1 - 3, 5 and 6.

B. No Suggestion or Motivation to Combine the Cited References

In page 4 of the Office Action, the Examiner states that it would be <u>obvious</u> to utilize the device of *White* with the vent and heat sensor disclosed by *Lavy*. The cited references do no more than disclose some of the various elements that appear in the present Application, none of which either alone or in combination meet the limitations of claims 2, 3, 5 and 6. Merely because various elements are shown in the prior art is insufficient to support a rejection of the present claims under 35 U.S.C. § 103, and Applicants respectfully submit that this does not establish a *prima facie* case of obviousness.

Moreover, MPEP § 2143.01 further provides that there must be a basis in the art for combining or modifying references, and the "mere fact that references <u>can</u> be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." Establishing a *prima facie* case of obviousness requires more than "common knowledge" or "common sense." Rather, the CAFC insists on a specific rationale for combining references and that a finding of obviousness be based on objective evidence of record. *In Re Lee*, 61 U.S.P.Q.2d 1430. Such "specific rationale" or "objective evidence of record" to combine these various cited references is lacking from the present § 103 rejections.

The Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a device for suspending shades or bowls in lighting fixtures of *White* with the vent and heat sensor disclosed by *Lavy* for the benefit and advantage to provide a lamp head incorporated with an anti-combustion arrangement which can allow air circulation and ventilation within the high temperature burning zone of the lamp and thus the heat generated therearound is reduced to a safe condition. Applicants respectfully disagrees.

The Examiner does not specifically identify any motivation to combine these references, nor does the Examiner describe why this would be a desirable improvement to White or what problem of White one would be attempting to solve with such a combination. Moreover, all inventions are a combination of elements that already exist. If claims are to be rejected on the basis that its several elements are mentioned in prior art, no claims

would ever be allowed. Thus, the prior art must suggest and provide an incentive for the proposed combination. "[I]t is irrelevant in determining obviousness that all or all other aspects of the claim may have been well known in the art." Jones v. Hardy, 727 F.2d 1524 (Fed. Cir. 1984).

Furthermore, Applicants was the first to recognize the advantage of creating a halogen-based torchiere lamp with a plurality of cooler burning halogen light bulb units. In fact, as apparent from the *White* reference, a plurality of light bulbs has been used in other lighting fixtures since at least as early as 1914; however, no one, until Applicant, has created a halogen based torchiere lamp with a plurality of halogen light bulb units. Since the introduction of halogen torchiere lamps in 1983, fire-safety has been an issue in the forefront of the minds of those skilled in the art, as is evidenced by the inventions incorporating such safety measures as glass or wire guards or shields, tipover switches, and heat sensors. However, no invention, until the present invention, has addressed the fire-safety problem by attacking the heat source itself – the light bulb. Up until now, all inventions have addressed reducing the heat once it has been emitted from the heat source or preventing combustible materials from entering the high temperature burning zone, rather than reducing the internal heat of the lighting source itself.

The results produced by Applicants' invention have long been sought after by those skilled in the art, but up until Applicants' invention the results have been unrealized. As twenty years have passed since the introduction of the first halogen torchiere lamps such an invention like Applicants' is therefore not obvious to one of ordinary skill in the art.

For the above-indicated reasons, *White* and *Lavy*, alone or in combination, fail to disclose or suggest all claim limitations in accordance with MPEP 2143. Moreover, the requisite suggestion or motivation to combine these references is also lacking. Accordingly, Applicants respectfully requests withdrawal of the 35 U.S.C. § 103(a) rejections.

4. Conclusion

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Applicants submits that all pending claims are allowable and respectfully requests that a Notice of Allowance be issued in this case. In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at 612-607-7508. If any fees are due in connection with the filing of this paper, then the

Commissioner is authorized to charge such fees including fees for any extension of time, to Deposit Account No. 50-1901 (Reference 13414-311).

Respectfully submitted,

Craig J. Lervick, Reg. No. 35,244

Attorney for Applicant

OPPENHEIMER WOLFF & DONNELLY LLP 45 South Seventh Street, Suite 3300

Minneapolis, MN 55402-1609

Phone: 612-607-7387; Fax: 612-607-7100

E-mail: CLervick@oppenheimer.com